# TREATMENT OF PLANT 6 MOTOR BAY SUMP WATER IN THE PLANT 8 VOLATILE ORGANIC COMPOUND (VOC) TREATMENT SYSTEM

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DOE-2234-92 DOE-FN/EPA 3 LETTER OU5



### Department of Energy

#### Fernald Environmental Management Project

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Mr. James A. Saric, Remedial Project Director United States Environmental Protection Agency Region V - HRE-8J 77 West Jackson Street Chicago, Illinois 60604-3590

Mr. Graham E. Mitchell, Project Manager Ohio Environmental Protection Agency 40 South Main Street Dayton, Ohio 45402-2086

Dear Mr. Saric and Mr. Mitchell:

TREATMENT OF PLANT 6 MOTOR BAY SUMP WATER IN THE PLANT 8 VOLATILE ORGANIC COMPOUND (VOC) TREATMENT SYSTEM

The purpose of this letter is to formally request concurrence from the United States Environmental Protection Agency (U.S. EPA) and the Ohio Environmental Protection Agency (OEPA) to treat the waters accumulating within the Plant 6 Motor Bay Sumps in the Plant 8 Volatile Organic Compound (VOC) treatment system. This plan of action has been discussed verbally with the OEPA.

The water accumulating within the four motor bay sumps is similar to the water currently being treated from the Plant 6 perched groundwater extraction wells. The four motor bay sumps discharged directly to the storm sewer system adjacent to Plant 6 until volatile compounds were discovered in them.

The attached table presents a summary and comparison of the results of analyses performed on waters collected from the motor bay sumps and from the extraction wells in Plant 6. Based on review of the contaminants, it has been determined that the Plant 8 VOC treatment system will adequately treat the motor bay sump waters.

The waters from the motor bay sumps are currently being pumped to drums and stored in temporarily diked areas. Due to the large amounts of rainfall, the amount of water accumulating in the motor bay sumps has recently increased. This increased rate of water accumulation makes drummed storage less and less practical. Therefore, your written concurrence in a timely manner will be greatly appreciated.

The removal action work plan for Plant 6 will be modified to include the treatment of the waters accumulating within the four motor bay sumps in the Plant 8 VOC Treatment System.

Sincerely,

FN:Yerace

Enclosure: As Stated

#### cc w/enc.:

- J. J. Fiore, EM-42, TREV
- K. A. Hayes, EM-424, TREV

- J. Benetti, USEPA-V, AT-18J M. Butler, USEPA-V, 5CS-TUB-3
- J. Kwasniewski, OEPA-Columbus
- P. Harris, OEPA-Dayton
- M. Proffitt, OEPA-Dayton
- T. Schneider, OEPA-Dayton T. W. Hahne, PRC
- L. August, GeoTrans
- R. L. Glenn, Parsons D. J. Carr, WEMCO
- L. S. Farmer, WEMCO
- J. P. Hopper, WEMCO
- J. D. Wood, ASI/IT
- J. E. Razor, ASI/IT
- AR Coordinator, WEMCO

## SUMMARY AND COMPARISON – RANGE OF ANALYTICAL RESULTS PLANT 6 MOTOR BAY SUMP WATER / PLANT 6 PERCHED WATER

PLANT 6 MOTOR BAY SUMP WATER	PLANT 6 PERCHED WATER	
ANALYSIS PERFORMED: -TCLP Metals	ANALYSIS PERFORMED: -Full HSL	
-TCLP Semi-Volatiles & Volatiles		
Detected Analytes:	Detected Analytes:	
VOLATILES	VOLATILES	
Toluene: 5-78	Toluene: 8-15	
TCA: 37-1,600	TCA: 10-48	
	TCE: 880-2400	
•	1,1 Dichloroethene: 5-15	
	1,1 Dichloroethane: 6,8	
	1,2 Dichloroethene(total): 9-31	
	1,2 Dichloroethane: 6-11	
	Tetrachloroethene: 15-43	
SEMI-VOLATILES	SEMI-VOLATILES	
ND	ND	
METALS	METALS*	
Arsenic: ND Lead: 7, 19.3	Arsenic: 2.2,2.4	Lead: 4.3-40.8
Barium: 19-626 Mercury: ND	Barium: 586 – 984	Mercury: ND
Cadmium: ND Selenium: ND	Cadmium: 123-210	Selenium: ND
Chromium: ND Silver: ND	Chromium: 2210-4098	Silver: 1240-2248

TCA= 1,1,1 Trichloroethane

TCE= Trichloroethene

ND= not detected

All results reported in parts per billion

\* All HSL metals detected not listed